

The Implications of Variations in Medicare Spending for Health Care Reform

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Invited Testimony
Committee on Energy and Commerce
United States House of Representatives

April 2, 2009

Thank you Mr. Chairman and distinguished members of the Committee for the invitation to address you today.

Rapidly rising health care costs pose a serious threat not only to the future of public and private health insurance coverage but also to the sustainability of efforts to expand coverage to the nearly 50 million uninsured Americans. Many policy experts have concluded that excessive growth in health care spending is a foregone conclusion, driven by inexorable forces. Most blame advancing technology. And some conclude that only by rationing beneficial care will the U.S. be able to achieve a sustainable and affordable future.

Data recently released by the Dartmouth Atlas Project call each of these assertions into question. Figure 1, reprinted from a recent commentary we wrote in the *New England Journal of Medicine*¹, shows average age-, sex-, and race-adjusted per-capita Medicare spending in five U.S. hospital-referral regions over the past 15 years. During this period, overall Medicare spending, adjusted for general price inflation, rose by 3.5% annually. But there was marked variation across regions. Per-capita inflation-adjusted spending in Miami grew at 5.0% annually, as compared with just 2.3% in Salem, Oregon. A total of 26 hospital-referral regions (including Dallas) had more rapid spending growth than Miami, and 16 regions (including San Diego) had slower growth than Salem, Oregon.

The variation in growth rates may appear small, but compounding makes a difference: if all U.S. regions can scale back their growth rates by just over 1 percentage point – as San Francisco already has done -- the Medicare program would be approximately \$1.4 trillion dollars better off by 2023 than under current growth rates.

This testimony draws heavily on previous testimony by Elliott Fisher, MD, MPH, but focuses in greater detail on the potential for gaining real cost savings from health reform. Below, key findings of our research on variations in Medicare spending are summarized, and the implications of proposed “accountable care organizations” on quality and costs are discussed.

Variations in Medicare Spending

Over thirty years ago, John Wennberg published his seminal article documenting the remarkable variations in practice and spending across small areas of Vermont.² With core support from the Robert Wood Johnson Foundation, and more recently from the National Institute of Aging, we applied these methods to the Medicare population and found variations of a similar magnitude.³ Most of the variation in spending across regions or hospitals and the populations they serve are not explained by differences in illness levels or by differences in prices (although these do account for some portion of the variation).⁴

Most of the differences in spending are due to greater use of what we refer to as “supply-sensitive services”, which we define as services - such as physician visits, hospital days, intensive care days, etc - where the local supply of the specific resource

has been shown empirically to be strongly associated with the use of the services delivered by that provider.⁵ Figure 2 compares the utilization of services across each of the U.S. regions highlighted in the first figure. Medicare beneficiaries in higher spending regions are hospitalized more frequently for conditions that could be treated outside the hospital: hospitalization rates in the Medicare population for Ambulatory Care Sensitive Conditions are twice as high in Miami as in Salem. Among Medicare beneficiaries with serious chronic illness, the frequency of physician visits is nearly twice as high in Miami as in San Francisco. Lower spending regions have a much higher proportion of care provided by primary care physicians. And higher spending regions have much more fragmented delivery systems: a much higher proportion of the population has 10 or more different physicians involved in their care during a given year.

Two critical questions are raised by these studies. What are the benefits, if any, of higher spending and greater use of supply sensitive services across US regions and hospitals? And, what are the causes of the differences we observe?

What are the benefits of higher spending?

Over the past 10 years, a number of studies have explored the relationship between higher spending and the quality and outcomes of care. The findings are consistent: higher spending does not generally result in better quality of care, whether one looks at the technical quality and reliability of hospital or ambulatory care⁶⁻⁸, survival following such serious conditions as a heart attack or hip fracture^{9, 10}, or patients' perceptions of the accessibility or quality of medical care and their experiences in the hospital.^{8, 11, 12} Even physicians in high spending regions report that they have greater difficulty providing good care. Remarkably, in regions where the numbers of hospital beds and specialists are *greater*, physicians are *more* likely to have difficulty getting their patients into the hospital or a specialist referral.¹³ Access is worse where there are more medical resources – a “paradox of plenty.”

What's going on? Why are access and quality worse in high spending regions?

Recent studies have examined the causes of differences in practice and spending. Patients' preferences for care vary only slightly across regions.^{11, 14, 15} Malpractice is reported by many physicians to influence their practice, but differences in the malpractice environment explain only 10% of state variations in spending.¹⁶

As suggested above, differences in supply are clearly important. In a payment system where provider incomes depend upon the volume of services they provide, patients in regions with more physicians have more frequent visits to physicians and patients in regions with more hospital beds per-capita are hospitalized more often.⁸ Local supply thus explains a substantial share of regional variations in spending. But some recent work also points to the key role of the discretionary decisions doctors make.^{17, 18} These studies found that physicians' decisions in higher spending regions were similar to those in low spending regions in cases where there is strong evidence for a treatment course (such as whether to refer a patient with chest pain and an abnormal stress test to a cardiologist). But in cases where judgment is required (such as whether to admit a patient with heart failure to the hospital, how frequently to see a patient with high blood

pressure, and whether to refer to a specialist for heartburn), physicians in high spending regions were much more likely to intervene than those in low spending regions.

A likely diagnosis. Current clinical evidence exerts an important but limited influence on clinical decision-making. Most physicians practice within a local organizational context and payment environment that profoundly influences their clinical decisions, especially in discretionary settings. In most locales, hospitals and physicians are rewarded for expanding capacity (especially for highly profitable services) and for recruiting additional procedure-oriented specialists (such as interventional cardiologists or radiologists). When there are more specialists or hospital beds available, primary care physicians and specialists will learn to rely on those specialists and use those beds – because it is more “efficient” from their perspective to do so, given the current payment system and lack of support for primary care. The consequence is that what seem to be “reasonable” decisions collectively lead to higher utilization rates, greater costs, and, inadvertently, worse quality of care and worse outcomes.

Harm could occur through several mechanisms.¹⁹ Greater use of diagnostic tests could find more abnormalities that would never have caused the patient any problem. Because most treatments have some risks, providing those treatments to patients who don’t need them could cause harm. (Hospitals are dangerous places to be if you could have been safely treated outside the hospital.) And as care becomes more complex and more physicians are involved, it will be less and less clear who is responsible for each aspect of a patient’s care: Miscommunication -- and errors -- becomes more likely.

Quantities and Prices

To discourage these expensive treatments with little benefit, it is important to “get the prices right.” But it’s also important to pay attention to and measure *quantities* of health care services. Until the Dartmouth Atlas came along, no one knew that in Elyria, Ohio, the rate of cardiac stents – a common and expensive procedure to reduce blockage in the heart – was three times the rate in neighboring Cleveland and 7 times the rate in Pueblo, Colorado. (These and other figures are from www.dartmouthatlas.org.) On average, Medicare enrollees at the NYU hospital spend more than a month of their last six months of life in a hospital bed. By contrast, Medicare enrollees at the University of Rochester Medical Center spend just 15 days in the hospital. The current Medicare system is like contracting with a new home builder, agreeing on the price per square foot, but letting him decide whether to build you a mansion or a cottage.

What is lacking in the U.S. health care system is accountability for the cascade of treatments and services in local systems, each of which might appear rational at the micro-level, but in the aggregate results in considerable inefficiency and waste. What type of organization would discourage this unconstrained growth in expensive health care treatments with uncertain benefits?

Accountable Care Organizations – a piece of the puzzle

We have proposed the development of Accountable Care Organizations (ACOs) as one approach to meeting the goal of supporting healthcare providers’ attainment of

better quality at lower cost. Working with Mark McClellan and others, we have developed design specifications and approaches to shared-savings payment that would support the development of Accountable Care Organizations as a key element of moving toward more integrated delivery systems and toward slowing the growth of spending.²⁰

An Accountable Care Organization is a local network of providers that can manage the full continuum of care for all patients within their provider network. They must be of sufficient size to allow accurate measurement of both quality and total costs. An ACO must have a defined administrative structure that is capable of meeting reporting requirements for the quality measures that will be expected and for receiving and distributing shared savings payments. Examples of current organizations that could meet these requirements include multispecialty group practices, independent practice associations, physician-hospital organizations and academic medical centers. Our research has shown because most physicians already practice within relatively coherent and well-defined referral networks around one or more hospitals,²¹ the formation of ACOs would require little disruption of current physician referral patterns and that almost all physicians and hospitals could feasibly participate in such networks.^{20, 22}

Because the natural referral networks upon which ACOs are likely to be built provide a large proportion of the care to their Medicare beneficiaries, there would be no need for beneficiaries to be “locked-in” to their ACO. As the early experience of the Physician Group Practice demonstration suggests, this provides an incentive for the ACO to provide high quality, patient centered care and to reach out effectively to their patients and other providers outside the ACO to effectively coordinate care.

Can We Recover Some of the Estimated \$700 Billion Wasted in the U.S. Health Care System?

Elliott Fisher has testified earlier about the challenges of, and opportunities for, setting up an ACO system. I want to talk about the potential of ACOs in extracting some of that \$700 billion in wasteful U.S. health care spending.^{8,9} The obvious sources of savings are the high cost regions where per capita Medicare expenditures are nearly double the national average. One could cap payments for a small number of “outlier” hospitals with off-the-charts expenditures, or cut reimbursement for high-cost providers who don’t participate in ACOs. But I expect few hospitals will find these restrictions binding in practice, since there are so many avenues for high-cost hospitals to scale back spending and thus avoid any penalties.

Another approach is to restrain the *growth rate* in spending. Previously, we have described a plan to share savings with ACOs able to ratchet back growth in health care costs (with the possibility of penalizing ACOs with unrestrained growth).²⁰ This approach encourages cost-saving technology and discourages investments in “gray-area” health care with high profit margins and uncertain benefits. Focusing on incentives relating to cost *growth* (instead of levels) carries the distinct political benefit of not penalizing existing high-cost providers today. On the other hand, the large savings arising from lowering growth rates don’t occur for several years. By contrast, scaling back payments to “outlier” hospitals or regions, as suggested above, yields immediate

savings.

As well, low-cost regions may perceive as unfair systems that rewards on the basis of growth rates. An allowed 5% growth rate in Miami provides far more additional federal dollars than a 5% growth rate in Salem, OR. However, it is certainly possible to design blended growth allowances. For example, in 2006 the national average of per-capita Medicare spending was \$8,304. Five percent of this would be \$415. Providing an equal dollar amount to each region (perhaps adjusted by the CMS wage index to allow for cost-of-living differences) would result in a smaller percentage growth in high cost regions and larger percentage growth in low cost regions. This dollar-weighted approach would lead to a gradual convergence in regional Medicare expenditure targets over time.

The good news is that small inflections in annual per-capita growth rates have enormous implications for the long-term solvency of Medicare and the sustainability of expanded insurance coverage. Using data from the 2008 Medicare Trustee's Report on projected revenues and total Part A and B spending, we estimated that Medicare will be \$660 billion in the hole by 2023. Reducing annual growth in per-capita spending from 3.5% (the national average) to 2.4% (the rate in San Francisco) would leave Medicare with a healthy estimated balance of \$758 billion, a cumulative savings of \$1.42 trillion.¹

Conclusion

The marked variations in spending levels, and in spending growth rates across regions, suggest that it should be possible to achieve sustainable and affordable spending growth, even under the current fee-for-service system. This will require providing incentives that encourage providers in low cost and low growth regions to continue their current trends while providing incentives for those in high growth and high cost regions to avoid further growth in capacity and in the intensity of services they provide to their patients.

Regardless of the actual structure of the final legislature, I believe that a necessary component of any successful health reform is to create accountable care organizations, reward them for providing high quality care that patients want, and for cutting costs with no discernable benefits.

Figure 1.

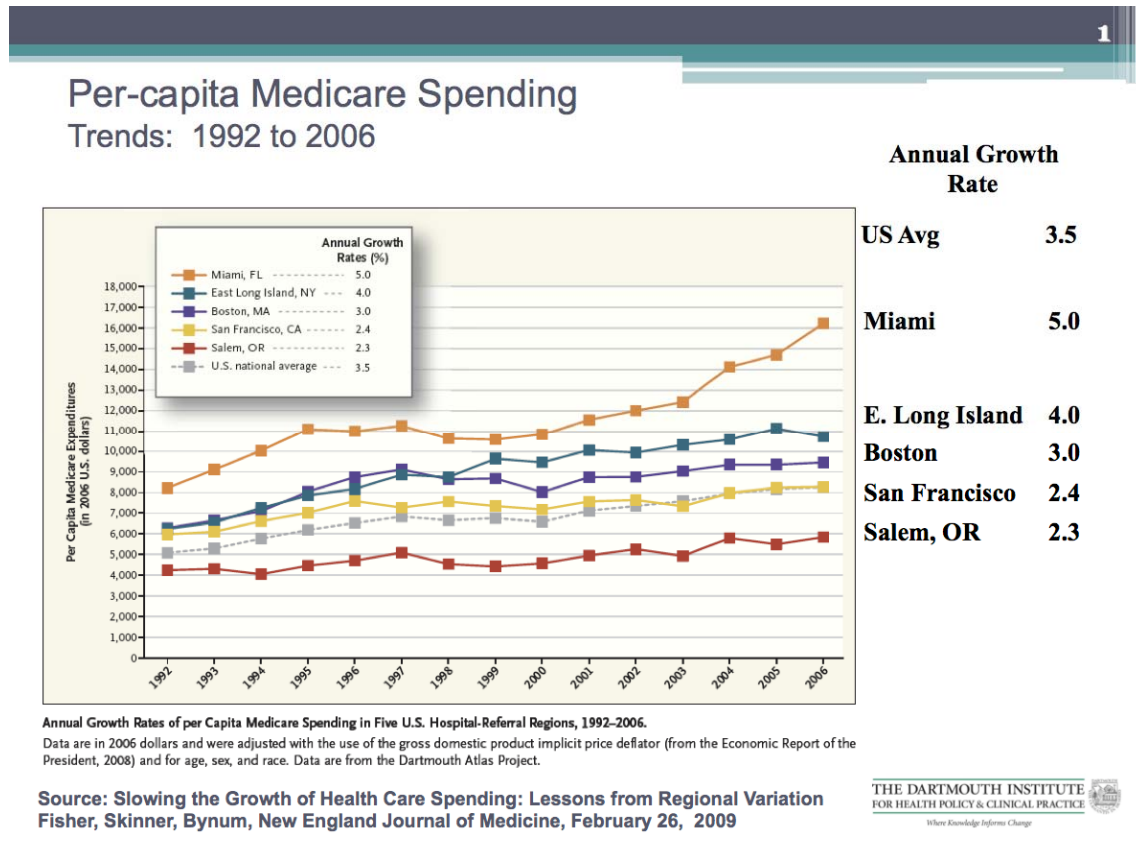


Figure 2.

What does higher spending buy? *More "supply-sensitive services"*

	Rate of Avoidable Admissions ¹	Physician Visits ²	Ratio Primary Care to Specialist visits ²	Percent seeing 10 or more MDs ²
Miami	95	106	0.72	51
E. Long Island	75	91	0.97	50
Boston	81	59	1.20	39
San Francisco	52	64	1.12	32
Salem	44	38	1.30	18

Notes

1. Ambulatory Care Sensitive Hospitalizations per 1000 Medicare beneficiaries
2. Utilization during last 2 years of life, Medicare beneficiaries with serious chronic illness.

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